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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/663,502	09/15/2003	Rickey Harvey	30137-CIP1	5249
23589	7590	07/07/2005	EXAMINER	
HOVEY WILLIAMS LLP 2405 GRAND BLVD., SUITE 400 KANSAS CITY, MO 64108			ADDIE, RAYMOND W	
			ART UNIT	PAPER NUMBER
			3671	

DATE MAILED: 07/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/663,502

Applicant(s)

HARVEY, RICKEY

Examiner

Raymond W. Addie

Art Unit

3671

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-26 is/are pending in the application.
- 4a) Of the above claim(s) 6-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-5 and 20-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 September 2003 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Specification

1. The abstract of the disclosure is objected to because the phrase "An improved roadway crack sealing apparatus (300, 314) is provided" is redundant. Correction is required. See MPEP § 608.01(b).

Claim Objections

2. Claim 23 is objected to because of the following informalities:
Ins. 2-3, the phrase "said side margin" should be --said lateral side margin--; to be consistent with the 1st recitation of "a lateral side margin", also in In. 2 of claim 23.
Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 24, 26 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: the functions to be performed by the signal receiver and the transmitter. Although the signal receiver is claimed to have an intended use for "receiving signals from an operator of the

apparatus when the operator is remote from the apparatus" and the device is claimed to further comprise a remote control transmitter; the claims fail to provide the essential structural cooperative relationships between the transmitter and signal receiver.

It is unclear as to what use the transmitter and signal receiver perform, since neither the operator, the signal receiver nor the transmitter are required to actually perform a function other than the ability to "receive a signal", and that the signal received is undefined, and indefinite as to if the received signal would actually cause a change in the operation of the device.

Does the remote transmitter and receiver activate the video camera, the selectively openable emulsion outlet or the wheels supporting the frame?

Hence, since one of ordinary skill in the art, would not be able to use the invention as claimed, it is indefinite as to how one would make or use the claimed invention.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 20, 2-4, 24-26 which depend from claim 20, are rejected under 35 U.S.C. 103(a) as being unpatentable over Hall et al. # 6,290,428 B1 in view of Lemelson # 5,584,597.

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Hall et al. discloses a crack sealing apparatus (10) comprising:

A frame (12) having handles (18, 33), wheels (20) and a motor (24).

An container (13) capable of containing an emulsion type roadway sealant (11).

A 1st lever (72) operable to control a selectively open able sealant outlet (67).

A 2nd lever (74) mounted on said handle (18) and being operatively connected to a cable (75) for opening and closing said selectively open able sealant outlet.

Wherein the selectively open able sealant outlet (67) further comprises a nozzle (66).

See cols. 5-8.

What Hall et al. does not disclose is the use of a video camera to observe the area being repaired.

However, Lemelson teaches it is known to provide a heating unit for nozzle (20). As well as a TV camera (220) to roadway repair machines, such that an operator of the machine can view the roadway, to identify damaged areas, such as cracks and potholes, and to visually monitor the repair process, from an operators seat, inside the machine. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to provide the crack repair apparatus of Hall et al., with a TV camera, as taught by Lemelson, in order to watch the repair process from inside the cab of the machine. See Col. 11, Ins. 10-30

In regards to claims 24, 26 Lemelson discloses the use of a variety of different types of remote control transmitters (64, 229) and a plurality of signal receivers (61, 217, 222) capable of receiving signals from an operator of the apparatus when the operator is remote from the apparatus. See Figs. 6, 8; Col. 8, Ins. 40-55, Col. 11, Ins. 19-43. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to provide the crack sealing apparatus of Hall et al., with manual and automated controls, as taught by Lemelson, in order to maximize accuracy of the crack filling process.

5. Claims 20, 3, 5, 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sterner # 5,354,145 in view of Lemelson # 5,584,597.

Sterner discloses a crack sealing apparatus comprising:

A frame (unnumbered, see figs. 3, 4).

An emulsion container (40) supported on the frame, and having a selectively opening sealant outlet, in the form of a nozzle (22).

A handle (10) extending from said frame.

A lever (16), located on said handle and operable to control the selectively open able sealant outlet (22).

A fill hopper (60).

A motor (58). See col. 3, ln. 65-col. 5, ln. 41.

What Hall et al. does not disclose is the use of a video camera to observe the area being repaired.

However, Lemelson teaches it is known to provide a heating unit for nozzle (20). As well as a TV camera (220) to roadway repair machines, such that an operator of the machine can view the roadway, to identify damaged areas, such as cracks and potholes, and to visually monitor the repair process, from an operators seat, inside the machine. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to provide the crack repair apparatus of Sterner., with a TV camera, as taught by Lemelson, in order to watch the repair process from inside the cab of the machine. See Col. 11, Ins. 10-30.

6. Claims 2, 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sterner # 5,354,145 in view of Lemelson # 5,584,597, as applied to claim 20 above, and further in view of Campbell # 5,851,085.

Sterner in view of Lemelson disclose a road maintenance apparatus having an emulsion container (40), having a selectively open able outlet; and a fill hopper (60) for receiving sand or other types of aggregate. What Sterner in view of Lemelson do not disclose is the use of a hopper gate to open and close an outlet of said hopper.

However, Campbell teaches that road maintenance apparatuses are desirably provided with a storage tank (300) for liquids, such as tack coats, and a hopper (16, 216) having

an outlet opening (50) further comprising a feeder gate (60) that is selectively open able and close able to control the amount of fill material being dispensed from the hopper. Such that the fill hopper and emulsion container can be positioned to provide spaced lateral side margins and an elongated sighting passageway between said side margins to permit an operator of the apparatus to view said sealant outlet, such that said sealant outlet can be located adjacent said lateral side margin, and said fill outlet, during movement of the apparatus. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to provide the road maintenance apparatus having a fill hopper of Sterner, with a feeder gate, as taught by Campbell, in order to accurately dispense a fill material onto a roadway being repaired. See Sterner cols. 5-6; Campbell col. 4, lns. 38-43.

Response to Arguments

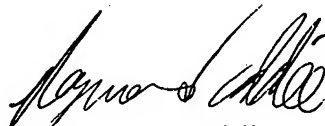
7. Applicant's arguments, see pages 10, 11, filed 2/28/05, with respect to the claim(s) 1-5, 20-26 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Lemelson # 5,584,597.

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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond W. Addie whose telephone number is 571 272-6986. The examiner can normally be reached on 6AM-2:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will can be reached on 571 272-6998. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Raymond Addie
Patent Examiner
Group 3600

07/02/05